NewsRelease

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Langley Research Center
Hampton, Virginia 23681-2199

Kathy Barnstorff
(757) 864-9886

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TEST SET FOR JUNE 22

Researchers will crash helicopter…on purpose

Researchers at the NASA Langley Research Center in Hampton plan to drop a helicopter from more than 40 feet to test whether design changes can help flight crews and passengers better survive an accident.

The Advanced Composite Airframe Program (ACAP) helicopter is equipped with an energy absorbing sub-floor and landing gear. Technicians have installed four instrumented crash test dummies inside to record conditions on impact.

The helicopter will be lifted by cable off the ground and suspended from Langley's Impact Dynamics Research Facility. On the afternoon of Tuesday, June 22, engineers plan to use those cables to swing the helicopter pendulum-style into the ground. Just before impact, pyro-technic devices will release the suspension cables from the helicopter to allow free flight. The helicopter will hit the ground at about 25 miles an hour.

Every move the helicopter and its occupants make will be recorded by 15 high speed film and four video cameras.

Researchers will use the information from the test not only to examine how well the special energy absorbing features performed, but also to help develop a more accurate computer model to predict helicopter crashworthiness.

The test, which is part of NASA's Aviation Safety Program, is a follow on to research started by the U.S. Army. NASA and Army engineers conducted a previous ACAP drop test in 1987.

The NASA Aviation Safety Program, headquartered at NASA Langley, is a partnership with the Federal Aviation Administration, aircraft manufacturers, airlines and the Department of Defense. This partnership supports the national goal announced by President Clinton to reduce the fatal aircraft accident rate by 80 percent in 10 years and by 90 percent over two and a half decades.

The aviation safety initiative was created in the summer of 1997 by NASA administrator Dan Goldin in response to a report from the White House Commission on Aviation Safety and Security, chaired by Vice President Al Gore. NASA has designated about $550 million over five years for aviation safety research and development, with more funding expected to follow.

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Researchers at four NASA field installations are working with the FAA and industry to develop affordable, implementable technologies to make flying safer: Langley; Ames Research Center at Moffett Field, Calif.; Dryden Flight Research Center in Edwards, Calif.; and Glenn Research Center in Cleveland, Ohio.

Because of advances in the last 40 years commercial airliners are already the safest of all major modes of transportation. But with an accident rate that has remained relatively constant in the last decade and air traffic expected to go up significantly over the next 20 years, the U.S. government wants to prevent a projected rise in the number of aircraft accidents.

For more information on the NASA Aviation Safety Program please check the Internet at: http://www.hq.nasa.gov/office/aero/oastthp/programs/avsaf/avsafpro.htm

The drop test is scheduled for about 2 p.m., but could be delayed by unforeseen circumstances. If you're planning to attend please call and check between noon and 1 p.m. and expect to be at the NASA Langley Main Gate at the end of Commander Shepard Blvd. by 1:30 if everything is on schedule. Researchers will be available for interviews after the test.

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